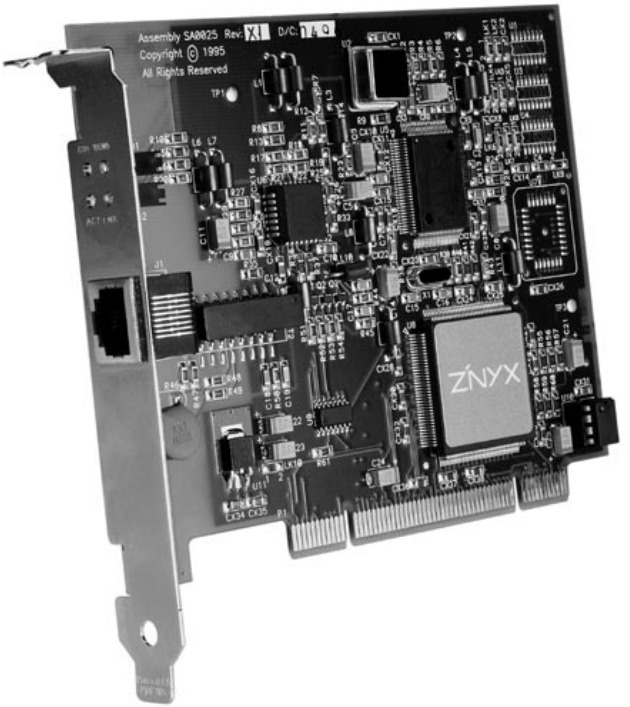
ZNYX



User's Guide

Ethernet and Fast Ethernet Adapters
For Apple® Mac™ OS Computers

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Ethernet and Fast Ethernet Adapters

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About This Manual

This manual provides instructions to install the ZNYX NetBlaster™ ZX312T-MAC Ethernet adapter and the NetBlaster ZX345-MAC Fast Ethernet adapter.

To install your ZNYX network adapter, you will need an Apple Macintosh®, Motorola StarMax™ or compatible with a PCI bus and Mac™ OS (Apple System 7.5.2 or later). This manual assumes that you have a basic understanding of your Macintosh or compatible (i.e. copying files, start-up procedures, etc.). If terms like "Control Panel" or "System Folder" are unfamiliar to you, we suggest you first become familiar with the owner's manual supplied with your computer system.

Unpacking

Examine the shipment to ensure each component has not been damaged by shipping. Your package should contain the following:

1) ZNYX NetBlaster network adapter (ZX312T-MAC or ZX345-MAC)
2) *Installation for Mac OS* driver diskette
3) *ZNYX User's Guide*

Precautions

Before commencing installation, observe these precautions:

1) Make sure that all power is turned off. Leave the computer plugged into the wall socket to ensure proper grounding.
2) To minimize static electricity, avoid carpeted and low humidity areas. Ground yourself by touching the chassis of your computer before touching the motherboard. If you are using an anti-static wrist strap, once you have opened the computer case, attach it to the metal chassis.

Quick Start

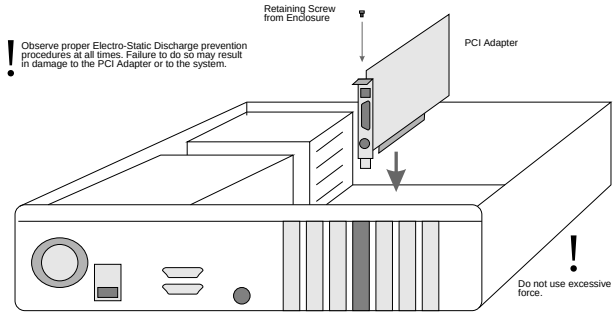
Installing your network adapter and software drivers is quite simple.

1) Turn your computer system off.
2) Install the adapter in your computer.
3) Connect cables from your adapter to the network.
4) Install the software driver.
5) Re-boot.

Hardware Installation

The following procedures will guide you through the installation of a ZNYX NetBlaster adapter.

1) Turn the power to your computer off and open the system cover. (It is recommended that you wait 5 minutes after turning off the computer before installing any peripheral cards).
2) Select a vacant PCI slot in the computer to install the adapter (your ZNYX network adapter may be installed in any vacant PCI slot). Once a slot has been selected, remove the corresponding access panel cover.
3) Discharge any static build up by touching the back of the computer's metal case before installing the adapter.
4) Position the adapter directly above the PCI slot socket and gently press the adapter into position. Be careful not to force the connection.
5) Replace the computer cover and attach any cables.


Retaining Screw from Enclosure
PCI Adapter
Observe proper Electro-Static Discharge prevention procedures at all times. Failure to do so may result in damage to the PCI Adapter or to the system.
Do not use excessive force.

Placement of ZNYX adapter in computer system

Software Driver Installation

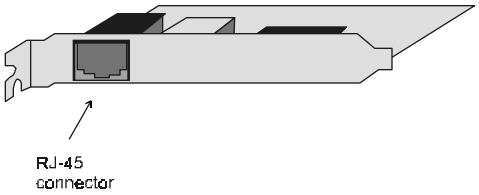
After installing the ZNYX network adapter, proceed with the following steps to install the appropriate software drivers on your system.

1) Insert the *Installation* diskette in the disk drive and double click the *ZNYX NetBlaster Installer* icon.
2) Choose *Custom Install* from the drop box menu located in the top left of the installer window.
3) Click the checkbox for the type of adapter you are installing. Choose either NetBlaster ZX312 (10 Mbps adapter) or NetBlaster ZX345 (10/100 Mbps adapter). Click on the *Continue* button.
4) When drivers are finished being installed, restart the computer.
5) Open *AppleTalk Control Panel* and select *Ethernet Slot "x"* (where "x" is the slot number with the installed adapter). Close Control Panel.

LED Status Indicators

The following is a description and function of ZNYX NetBlaster adapter LEDs:

LED	Name	Color	Function
LINK	Link	Green	When lit, indicates a valid network connection between adapter and network
ACT	Activity	Yellow	Blinks when data is being transmitted between adapter and network



Connector on a ZNYX NetBlaster ZX312T-MAC adapter

Troubleshooting

If you have trouble with the Ethernet network where one node seems to have problems communicating or certain nodes have trouble communicating with each other, pinpoint the problem to the offending node(s) and diagnose in the following way.

First make sure that AppleTalk is active (in the Chooser) and that the appropriate NetBlaster adapter card is selected (in the AppleTalk or Network Control Panel). If problems persist, continue as outlined below.

1) Turn the computer off.
2) Review the section on Hardware and Software Installation and ensure the adapter is correctly installed.
3) Make sure the adapter is securely seated in the expansion slot.
4) Verify that all network cables meet the 10BaseT or 100BaseTX specifications.
5) Restart the computer.

Technical Specifications

NetBlaster ZX345-MAC Fast Ethernet PCI Adapter

System Support	Apple Macintosh Performa with PCI slot (Model 6360 and 6400 Series), Apple Power Macintosh, Apple Workgroup Server (Model 7250 and 8550), and Motorola StarMax (Series 3000 and 4000)
Driver Support	Open Transport: Apple System 7.5.2 or later, AppleShare, AppleTalk, NetWare for Macintosh, TCP/IP
Connector	RJ-45 (for 10BaseT or 100BaseTX)
Media	10BaseT: Cat 3, 4, or 5 UTP on 2 pairs up to 100M 100BaseTX: Cat 5 UTP on 2 pairs up to 100M
Bus Interface	PCI Revision 2.0 and 2.1, shares interrupt A
Channel Speeds	IEEE Auto Negotiation of 10BaseT and 100 BaseTX
Configuration	Plug-and-Play
Communications	IEEE 802.3u 100BaseTX; IEEE 802.3i 10BaseT
Controllers	DECchip 21140, 32-bit internal processor per channel
Power	1.2A @ 5V typical
Safety	UL / c(UL)
Temperature	0 to 50°C (32 to 122°F)
Humidity	Maximum of 90%, non-condensing
Certifications	FCC Part 15 Class B; CE; IEC 801-2, 801-3, 801-4; CISPR22 Class B
Dimensions	5.75" x 3.875"
Diagnostic LEDs	Separate 100 Mbps, link, activity and collision
Manufacture	Designed and manufactured in the USA

NetBlaster ZX312T-MAC Ethernet PCI Adapter

System Support	Apple Macintosh Performa with PCI slot (Model 6360 and 6400 Series), Apple Workgroup Server (Model 8550), and Motorola StarMax (Series 3000 and 4000)
Driver Support	Open Transport: Apple System 7.5.2 or later, AppleShare, AppleTalk, NetWare for Macintosh, TCP/IP
Connectors	RJ-45 (10BaseT)
Media	Category 3, 4, or 5 UTP on 2 pairs up to 100M
Bus Interface	PCI Revision 2.0 and 2.1, shares interrupt A
Channel Speeds	10 Mbps or 20 Mbps with full duplex
Configuration	Plug-and-Play
Communications	IEEE 802.3i 10BaseT
Controllers	DECchip 21040, 32-bit internal processor
Power	1.2A @ 5V typical
Safety	UL / c(UL)
Temperature	0 to 50°C (32 to 122°F)
Humidity	Maximum of 90%, non-condensing
Certifications	FCC Part 15 Class B, CE, CISPR22 Class B, IEC 801-2,-3, -4
Dimensions	5.75" x 3.875"
Diagnostic LEDs	Separate link and activity
Manufacture	Designed and manufactured in the USA

FCC Notices

The following notices are required by the Federal Communications Commission. Each ZNYX adapter is covered under a separate report.

· NetBlaster ZX312
· NetBlaster ZX345

FCC Radio Frequency Interference Statement

This ZNYX ZX312 and ZX345 have been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

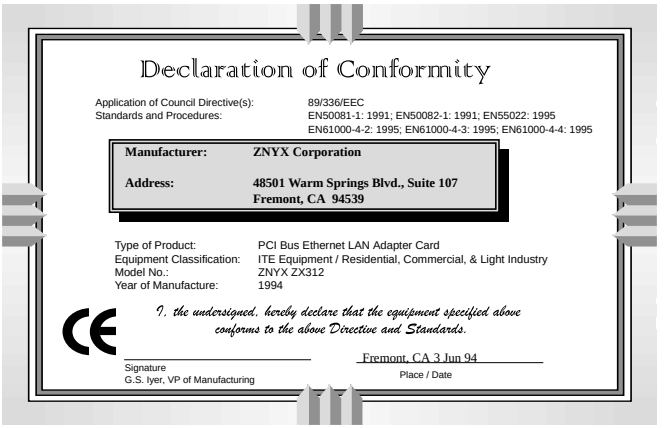
UL Certification

- NetBlaster ZX312T-MAC
- NetBlaster ZX345-MAC

UL File #: E161961

These adapter cards are for use only with Apple Macintosh, Motorola StarMax or compatible UL listed personal computers that have enclosed power supplies with SELV outputs and installation instructions detailing user installation of card CAGE accessories.

Declaration of Conformity



Declaration of Conformity

Application of Council Directive(s): 89/336/EEC
Standards and Procedures: EN50081-1: 1991; EN50082-1: 1991; EN55022: 1995
EN61000-4-2: 1995; EN61000-4-3: 1995; EN61000-4-4: 1995

Manufacturer: **ZNYX Corporation**

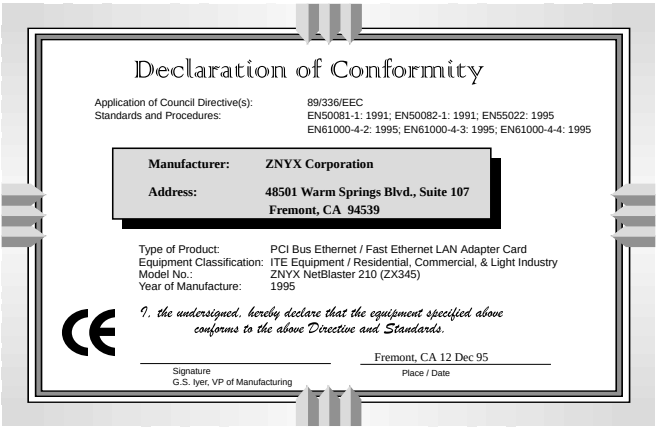
Address: **48501 Warm Springs Blvd., Suite 107**
Fremont, CA 94539

Type of Product: PCI Bus Ethernet LAN Adapter Card
Equipment Classification: ITE Equipment / Residential, Commercial, & Light Industry
Model No.: ZNYX ZX312
Year of Manufacture: 1994

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standards.

Signature
G.S. Iyer, VP of Manufacturing

Fremont, CA 3 Jun 94
Place / Date



Declaration of Conformity

Application of Council Directive(s): 89/336/EEC
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EN61000-4-2: 1995; EN61000-4-3: 1995; EN61000-4-4: 1995

Manufacturer: **ZNYX Corporation**

Address: **48501 Warm Springs Blvd., Suite 107**
Fremont, CA 94539

Type of Product: PCI Bus Ethernet / Fast Ethernet LAN Adapter Card
Equipment Classification: ITE Equipment / Residential, Commercial, & Light Industry
Model No.: ZNYX NetBlaster 210 (ZX345)
Year of Manufacture: 1995

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standards.

Signature
G.S. Iyer, VP of Manufacturing

Fremont, CA 12 Dec 95
Place / Date

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